

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable



1410271

<https://www.phoenixcontact.com/us/products/1410271>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 3-position, PUR halogen-free, gray RAL 7001, free cable end, on Socket angled M12, coding: B, cable length: 10 m

Commercial data

Item number	1410271
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	AF1CBA
GTIN	4046356893213
Weight per piece (including packing)	227 g
Weight per piece (excluding packing)	214.8 g
Country of origin	PL

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable



1410271

<https://www.phoenixcontact.com/us/products/1410271>

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	B

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	------------

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.4 Nm
-------------------	--------

Connector

Connection 1

Type	free cable end
------	----------------

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable



1410271

<https://www.phoenixcontact.com/us/products/1410271>

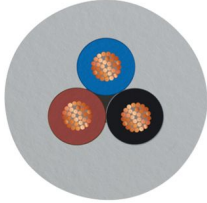
Connection 2

Type	Socket angled M12
Number of positions	3
Coding type	B

Cable/line

Cable length	10 m
--------------	------

PUR halogen-free gray [280]

Dimensional drawing	
Cable weight	23.42 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Shielded	no
Cable type	PUR halogen-free gray [280]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	3x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.05 mm
External cable diameter	3.95 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, blue, black
Thickness, insulation	≥ 0.20 mm
Thickness, outer sheath	approx. 0.40 mm
Overall twist	3 wires, twisted
Max. conductor resistance	≤ 58 Ω/km
Insulation resistance	≥ 20 MΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	40 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable



1410271

<https://www.phoenixcontact.com/us/products/1410271>

	m/s²
Halogen-free	in accordance with DIN VDE 0472 part 815 EN 50267-2-1
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A) Low adhesion abrasion-resistant
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish flexible
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65 IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket) -25 °C ... 80 °C (cable, fixed installation)

Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable

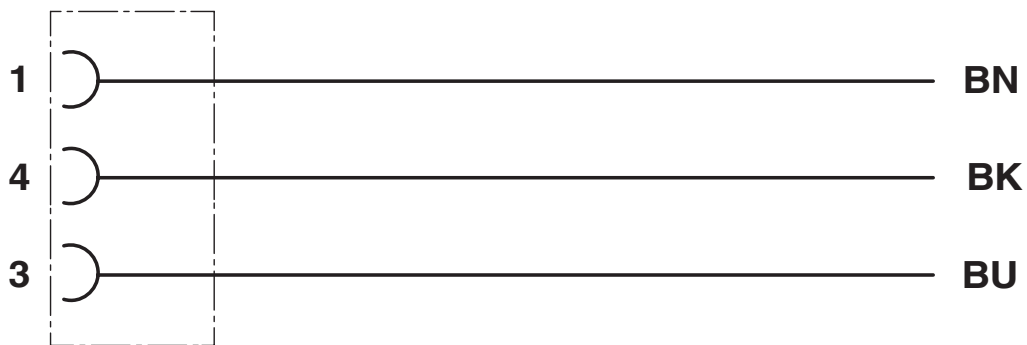


1410271

<https://www.phoenixcontact.com/us/products/1410271>

Drawings

Circuit diagram



Contact assignment of the M12 socket

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable



1410271

<https://www.phoenixcontact.com/us/products/1410271>

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

SAC-3P-10,0-280/M12FRB OBS - Sensor/actuator cable



1410271

<https://www.phoenixcontact.com/us/products/1410271>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com